

Particle self-action effects in a gravitational field

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Abstract

The particle self-energy and self-force in a gravitational field are considered. The particle self-action phenomena in a gravitational field of black holes, in spaces of both the infinitely thin and finite-thickness cosmic strings, as well as of a point global monopole are discussed. Some effects related to particle self-action are covered. © 2005 Uspekhi Fizicheskikh Nauk, Russian Academy of Sciences.

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